Rise Above the Flood – Explore and Discover Mount Rainier



Mount Rainier's reflection captured in Tipsoo Lake

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During the flood, fish found safety in slower streams and may now feed and spawn in new channels. Where rivers divided through the forest, some habitats were lost but the opportunity for another forest to succeed was gained. The Ohanapecosh River deposited 3 feet of silt atop the roots of 1000 year old trees at the Grove of the Patriarchs. Will they continue to live?

Some flora survived the flood. Some fauna adapted to the change in their environment. Visitors, park officials and volunteers also need to adjust to physical and environmental changes. Once you reach your destination, stay and explore the area. Discover and experience Mount Rainier from any location.

Northwest

This is the closest point from Seattle and what more could a nature lover want? Explore the park's only rainforest, subalpine meadows, waterfalls, glaciers and mountain views.

Mowich Lake – Mowich Lake is the largest and deepest lake in the park. Canoes glide across the lake as the wakes ruffle the mountain's reflections. Enjoy the serenity while fishing the deep waters or hiking the nearby trails.

One of the most incredible summer hikes in the park is the Spray Park Trail. It is a six mile roundtrip hike up and down forested terrain to the subalpine meadows of Spray Park. Stay on the trail to minimize your impact on this fragile environment so that it remains beautiful.

The road to Mowich is unpaved after the first three miles and may be rough. Check the road status. Mowich is reached via state SR 165.

Carbon River – At the entrance, gaze into a temperate rainforest. Discover nurse logs and other rainforest characteristics along the 1/4 mile self guided loop trail.

The Carbon River is a dynamic force that continues to braid and change channels. This summer, due to the river's whims, the road is closed. Park your car 1/2 before the entrance station. Hike or bicycle 1 mile to view the natural damage which the November floods brought or 5 miles to Ipsut Creek Campground.

Three miles beyond the campground you can experience the sights and sounds of Mount Rainier's largest glacier, the Carbon Glacier.

Note: Ipsut Creek Campground is for backcountry use only in 2007. You must get a camping permit to stay overnight.

Northeast - Highway 410

The day begins with sunlight pouring over the mountain. Explore Tipsoo Lake, the geology, alpine ecology and meadows.

White River – At the White River Entrance Station the wilderness information center provides current

wilderness camping and climbing permits. trail conditions, and trip planning.

Trails leading to two favorite camps along the 93 mile Wonderland Trail begin from this road. Other trails will lead you to lakes, meadows, and mountain goats as you explore the eastern slopes of Mount Rainier.

Camp at the White River Campground. Listen to the boulders clunk as the water pushes them through the channel. Offer support to the brave who start their climb to the summit from the campground.

Sunrise – If you choose to picnic, hike or simply daydream, Sunrise is the place. Sunrise offers a panoramic view of Mount Rainier and the surrounding peaks from 6400' above sea level. Visit Sunrise mid-week to avoid weekend crowds.

Explore the many facets of subalpine and alpine ecologies. Wildflowers highlight the summer landscape creating meadows that define survival and adaptation.

Stretch your legs along one of the trails, such as the strenuous but awesome Burroughs hike. Look down on Grand Park from the Fremont Trail or stroll the 1 mile round trip Silver Forest Trail.

Learn about the rustic architecture and history of Yakima Park. Ask to visit the historic ranger station. Afterwards grab an ice cream cone at the day lodge.



The clear water of the Ohanapecosh River

Southeast

Old growth is the signature for most of the southeast but it is also has an abundancy of wildlife and waterfalls.

Box Canyon - This canyon was carved by the Muddy Fork of the Cowlitz River and scarred by one of Mount Rainier's a glaciers. It is 150 feet deep but only 10 feet wide. Enjoy a lunch at the designated picnic just up the road to the east.

Ohanapecosh – Upon arival at the Ohanapecosh Visitor Center and Campground, observe the old growth forest, its protective canopy and lush understory. Discover the amazing variety of arthropods (insects, spiders, millipedes...) that help decompose the forest floor. Listen to the ravens, thrushes and wrens. Explore the signs and tracks that animals have left behind.

Take the 2.5 mile forest hike to Silver Falls, a 75 foot cascading waterfall. Hike to the Pacific Crest Trail (PCT) via the 12 mile round trip Laughing Water Creek trail. Touch the Wonderland Trail from the Cowlitz Divide Trail. Rangers at the visitor center can also provide information about hiking in the Gifford Pinchot Forest.

Follow the East Side Trail alongside the Ohanapecosh River to the Grove of the Patriarchs. Stand among the ancient trees and wonder about their history. The bridge that crosses the river to the Grove may not be accessible until August.

Simple Ways To Experience the Beauty of Mount Rainier Walk through a forest

Dream about climbing to the summit

Photograph a flower

Wait for the sound of a glacier cracking

Smell the meadows

Watch the clouds grow and disappear

Sit by a stream

Listen and count the sounds

Take a hike

Visit a rustic historic building

Walk across a suspension bridge
Think about the past

- IIIII about the past

Follow a banana slug
Observe a marmot

Begin your own Mount Rainier tradition

South - Southwest

Besides glaciers, rivers and forests this area is rich in history, offers plenty of hiking, has breathtaking vistas and artistic meadows.

Longmire – Begin your day by taking the self-guided walking tour through Longmire. This is a significant part of the Mount Rainier National Historic Landmark District. Units were built with logs and glacial boulders to reflect the natural setting.

Pick up a walking tour guide at the museum. While there, meet "Charlie" and explore the other natural and cultural exhibits. Talk with the ranger about the history of the area.

The easy, 0.7 mile round trip Trail of The Shadows is across the main road. Explore the early history of the Longmire Mineral Springs Resort.

End your day at Longmire watching the colors of the sunset glow against the snow capped mountain. Spend the night at the National Park Inn or unwind with coffee and blackberry cobbler.

Paradise – Summer at Paradise is, well, Paradise! But with construction of a new visitor center and the rehabilitation of the historic Paradise Inn, weekends are a difficult time to experience Paradise. Avoid busy weekends by visiting mid-week.

- Parking on site is very limited.
- Use the Longmire Paradise Shuttle to avoid parking congestion.
- Consult the Paradise Visitor Guide for more information (pages 3 and 4).



The Transportation Exhibit at the historic Longmire Gas Station

Where Can I Go To View The Flood?

As repairs to roads and other structures are completed it becomes more difficult to view the effects of the flood from your car. Choose from the following options to observe remaining flood damage:

- 1. Observe the following locations as you drive along the road from the Nisqually Entrance to Paradise. Do not stop on the road. Pull over only in designated areas.
- Just beyond the entrance, you will approach a curve
 - that opens to a grand view of the Nisqually River. This is the former site for Sunshine Point Campground and Picnic Area. The road beneath you was rebuilt.
- Slow down to 20 mph through the Kautz Creek area. Notice the lack of water flowing underneath the bridge. Proceed with caution through this area. You will see the new channel to which Kautz Creek was naturally diverted and drive on another section of rebuilt road.
- Along the drive, observe the wide river channel which was cut as the Nisqually River eroded away many trees and redefined the landscape.



Above: A channel of the Carbon River carried away the ground beneath the historic Ipsut Creek Cabin.

2. The visitor centers and wilderness information centers have a collection of photographs that describe the scope of change that occurred during the flood. Browse through the pages. Also, a slide show on the flood will be presented at the Jackson Visitor Center at Paradise daily at 3 p.m.

3. Experience and view flood damage by taking a hike! You may have to walk along a rerouted trail or cross a creek without a bridge. The trail may be covered with sediment deposited from a river or stream. You may encounter large obstacles such as downed trees and large boulders may be obstacles. Watch your step and

stay safe but observe the changes which resulted from the November 2006 flood.

4. If you spend a night in one of the campgrounds, the river nearby will provide a story of the flood. Examine the braids in the river channel. Look for debris in the river and watch how the river flows around it. Notice changes in the landscape which may have been redesigned by the flood: open areas, deposits, and undercuttings.

Why Is The River Red?

The water flowing through Kautz Creek, Nisqually River, Tahoma Creek and even the Ohanapecosh River may have a red tint.

According to Barbara Samora, Park Biologist, "We believe that the red waters you see are the result of iron oxidation. It is coming from sedimentation that is occurring upstream where soils and rocks have a high iron content. This is not unusual, as we have seen a red tint in the waters in the past, but we seem to be seeing more of it this year."

In the November flood, landscapes were severely altered, as soil, rock and trees were relocated. With this erosion, sedimentation increases into adjacent streams and provides an opportunity for oxidation to occur.

"In the case of Tahoma Creek," Samora says,
"We believe this is also geothermally related (you can smell the sulfur in some locations along the streams), which has been documented in the past."

Geologist Tom Sisson from the USGS notes that pyrite, found at the toe of the Tahoma Glacier, weathers in wet environments. It releases sulfur and precipitates other iron compounds.

Since previous lahars entered the Tahoma Creek drainage, it is likely that weathering of pyrite in those deposits is liberating sulfur as sulfuric acid.

Dedication, Cooperation and Pride Reopen Mount Rainier



On a day to day basis when Mount Rainier National Park enjoys the company of thousands of visitors, many dedicated employees and volunteers work to keep it safe and clean. They provide opportunities for you to experience the park's beauty and heritage. They protect and preserve the natural and cultural resources.

Given the November 2006 flood, these same people urgently responded with pride, determination, sweat and perseverance to reestablish safe access to the landscapes and to honor the ecosystems of Mount Rainier National Park.

The tasks that began while the flood was in progress mainly dealt with personal safety and the security of property. In the days following the flood, assessment and stabilization turned to recovery efforts as road crews rebuilt sections of the Nisqually Road. Teams were established to evaluate trails and wilderness conditions. Power and sewer lines were restored.

As the individual efforts are numerous and hard to recount, the cumulative efforts have resulted in a safe and successful reopening of Mount Rainier. Day to day operations have resumed but flood-

related tasks are in progress.

The rivers and adjacent ecosystems are being studied and monitored. As the snow melts debris is being cleared from trails and foot bridges are replaced. In some cases trails are closed or rerouted.

Visitors will witness the progress day to day and month to month as many projects are completed. The Wonderland Trail will be repaired. Auto access across Hwy 123 will be reestablished. Climbers will have a safe hike on a rerouted Glacier Basin Trail.

Although visitors may not be able to drive through the park this summer to visit all of the features of Mount Rainier, the experience will be safe and enjoyable thanks to a growing team of employees and volunteers (read more about volunteering below).

As the cooperation continues throughout next year, many individuals will provide the skills and talents needed so that Mount Rainier is preserved and protected for the enjoyment of future generations.

Partners in Recovery

In the days and months following the floods of November 2006, thousands of individuals, groups, and businesses contacted Mount Rainier National Park to offer their support. "I've spent my entire 60 years loving and hiking every inch of the Mountain," wrote one person. "It's time to give a little back while this lady still has it in her!"

To assist with recovery projects, and to provide people with opportunities to help out, Mount Rainier National Park formed a partnership this winter with the Student Conservation Association (SCA). A 17 member "Mount Rainier Recovery Corps" is now leading projects around the mountain, with the help of volunteers and generous financial support from donors and local businesses.

To coordinate fund raising and support, several groups have joined SCA and the National Park Service in forming the "Northwest Storm Recovery Coalition". Members include the Washington Trails Association, Washington's National Parks Fund, National Parks Conservation Association and Mountaineers. Learn more at nwstormrecorverycoalition.blogspot.com.

You can help, too! Visit www.nps.gov/mora to find out more about our volunteer program, including news and photos of current projects, or ask at any visitor center.

Go to www.theSCA.org/Mt_Rainier_Recovery for a complete calendar of volunteer projects. Sign up ahead of time, and make volunteering a part of your vacation. It's a great way to become part of the history of the mountain, and to contribute to a place that has held such meaning for so long.



Trail crew at work after the flood.